



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,825	04/16/2004	David A. Fine	163.1630USII	1732

43896 7590 05/10/2006

ECOLAB INC.
MAIL STOP ESC-F7, 655 LONE OAK DRIVE
EAGAN, MN 55121

EXAMINER

DOUYON, LORNA M

ART UNIT	PAPER NUMBER
----------	--------------

1751

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/826,825

Applicant(s)

FINE ET AL.

Examiner

Lorna M. Douyon

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 12-17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11 and 18-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/16/04; 11/15/04</u> | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1751

1. Applicant's election of Group II, claim 11 and newly added claims 18-26 in the reply filed on February 17, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 1-26 are pending. Claims 1-10 and 12-17 are withdrawn from consideration.

Specification

3. It is suggested that the **title of the invention** and the **abstract of the disclosure** be amended inasmuch as there are no composition claims.

Claim Rejections - 35 USC § 112

4. Claims 11, 18-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In independent claim 11, the limitation "at least about 5 wt-% active enzyme composition" (see line 6) is nowhere supported in the specification. On page 5, line 31, to page 6, line 1, the active enzyme composition (e.g., protease plus enzyme activity agents) is from about 10 to about 25 wt-%. In Table 1 on page 33, compositional ranges for the active enzyme composition is also disclosed (i.e., 0-30 wt-%, 1-30 wt-%, 15-25 wt-% or 20 wt%) but there is no

Art Unit: 1751

support for the “at least 5 wt-%...” as required in the present claims. Hence, said limitation contains new matter.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 11, 18-21, 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu et al. (US Patent No. 6,521,581), hereinafter “Hsu”.

Hsu teaches a layered liquid laundry detergent composition in a water-soluble single use package, the composition comprises at least two layers (which read on heterogeneous cleaning composition), the at least two layers comprising a surfactant, a colored inorganic electrolyte, and

Art Unit: 1751

water (see abstract; col. 11, lines 22-23). In use, the package is mixed with water (e.g., inside a laundry machine), in order to dissolve the body and to release the contents of the package (see col. 14, lines 21-23). The surfactant should comprise at least 5%, e.g., 5% to 80% of the composition (see col. 3, lines 21-24). The surfactants include anionic, nonionic, cationic (which read on the active conditioning ingredients), amphoteric and zwitterionic surfactants (see col. 3, line 13 to col. 7, line 15). The colored inorganic electrolyte comprises from 5 to 50% of the composition (see col. 8, lines 54-58). When mixtures of the colored inorganic electrolyte are employed with additional inorganic or organic electrolytes, the amount of the colored inorganic electrolyte in the range from 0.001 to 10% while the amount of all the electrolyte is from 1 to 50% (see col. 9, lines 18-25). Sodium citrate (which is also a sequestrant) is an example of additional electrolyte (see col. 9, lines 46-58). Another example of electrolyte is sodium carbonate (see col. 9, lines 46-56), which can also read as a source of alkalinity. The volume ratio of the two components in the final composition is generally in the range of from 10:90 to 90:10, and more than two layers may be present (see col. 12, lines 19-27). The additional layer may be a capsule (which reads on the at least one powder), dispersion or emulsion layer (see col. 12, lines 27-29). Preferred ingredients to be encapsulated are enzymes, bleaches, colorants, perfumes, and mixtures thereof and the preferred compositions comprise from 0.5 to 20% in order to attain optimum performance and/or appearance (see col. 13, lines 45-60). The preferred laundry composition may further include one or more well known ingredients, such as builders, from 0.1 to 20%, (which also reads on source of alkalinity), antiredeposition agents and fluorescent dyes (see col. 13, lines 61-67). Optional ingredients include hydrotrope in amounts from 0 to 30%, preferably from 0.5 to 20% (see col. 12, lines 38-52) (which minimum limits

Art Unit: 1751

read on inconsequential amount of hydrotrope required in claim 21). Hsu also discloses that prior art dual layer liquid cleaning compositions are packaged in a bottle (see col. 1, lines 39-63). Hsu, however, fails to specifically disclose (1) a method for cleaning textile wherein the heterogeneous composition comprises the recited active ingredients comprising surfactant, sequestrant and enzymes in amounts as those recited, (2) diluting the heterogeneous cleaning composition to form an intermediate homogeneous cleaning composition and diluting the homogeneous cleaning composition to form a use solution, and diluted in their respective concentrations and (3) wherein the cleaning composition is in a rigid container.

With respect to difference (1), it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range of surfactant, sequestrant and enzymes which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff*, 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

Art Unit: 1751

With respect to difference (2), it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the teachings of Hsu in col. 14, lines 21-23, i.e., “in use, the package is mixed with water (e.g., inside a laundry machine), in order to dissolve the body and to release the contents of the package” to read on the two diluting steps of the present claims because the addition of water in the laundry machine at the start of the laundering cycle dilutes the composition in the package and further dilutes it until the laundry machine has reached its water level, and during such water addition, the resulting concentration would have overlapped the concentration within those recited.

With respect to difference (3), it would have been obvious to one of ordinary skill in the art at the time the invention was made to package the layered liquid detergent composition of Hsu in a bottle because it is known from prior art, as disclosed in col. 1, lines 39-42, that dual layer liquid cleaning compositions are commonly packaged in a bottle.

8. Claims 11, 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Antheunis et al. (EP 0,413,616), hereinafter “Antheunis”.

Antheunis teaches a non-aqueous nonionic heavy duty laundry detergent composition which comprises a liquid phase of non-ionic surfactant and a solid, dispersed phase of insolubles at least one of which is a builder such as sodium tripolyphosphate and trisodium citrate (see abstract). Antheunis also teaches that it is an object of this invention to provide liquid fabric treating compositions which are suspensions of insoluble fabric-treating particles in a non-aqueous liquid and which are storage and transportation stable (see page 5, lines 12-14), and this is achieved by providing a heterogeneous system of solids in a liquid medium which is structured

Art Unit: 1751

to act as a solid during states of rest and under the ordinary stresses of vibrations, oscillations, shear forces and the like which occur during the handling of the packaged product (see page 5, lines 20-23). Antheunis also teaches a method for laundering clothes which comprises washing the clothes in an aqueous bath containing the composition (see claim 20; page 2, lines 3-7). The liquid phase of the composition is comprised predominantly or totally of liquid nonionic synthetic organic detergent (see page 7, lines 40-41). The amount of the nonionic surfactant is generally within the range of from about 20 to about 70% by weight of the composition (see page 10, lines 26-27). The detergent compositions also include as an essential ingredient water-soluble and/or water-dispersible detergent builder salts (see page 10, lines 42-43), for example, alkali metal carbonates, phosphates and polyphosphates (see page 10, lines 42-55), which builders read both on sequestrants and source of alkalinity. The proportion of the suspended detergent builder, based on the total composition, is usually in the range of from about 30 to 70 weight percent (see page 11, lines 22-24). The compositions of the present invention are generally highly concentrated (see page 11, line 35). In addition to the detergent builder, various other detergent additives or adjuvants may be present such as soil suspending or anti-redeposition agents usually in amounts of up to 10 weight percent; optical brighteners in amounts of up to about 2 weight percent (see page 1, lines 44-53); and up to 10% enzymes (see claim 16), and wherein the enzymes comprise a mixed enzyme system (see claim 17). The composition of does not contain water. The compositions may be packaged in conventional glass or plastic vessels (which are rigid containers), see page 13, lines 36-37. Antheunis, however, fails to specifically disclose (1) a method for cleaning textile wherein the heterogeneous composition comprises the recited active ingredients comprising surfactant, sequestrant and enzymes in

Art Unit: 1751

amounts as those recited, (2) diluting the heterogeneous cleaning composition to form an intermediate homogeneous cleaning composition and diluting the homogeneous cleaning composition to form a use solution, and diluted in their respective concentrations, and (3) the step of inverting the rigid container prior to diluting the heterogeneous cleaning composition, wherein upon inverting the rigid container a portion of the heterogeneous cleaning composition leaves the rigid container and a portion of the heterogeneous cleaning composition remains in the container as required in claim 22.

With respect to difference (1), it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range of surfactant, sequestrant and enzymes which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff*, 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

With respect to difference (2), it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the method for laundering clothes of

Art Unit: 1751

Antheunis which comprises washing the clothes in an aqueous bath containing the composition as disclosed in claim 20 and page 2, lines 3-7 to read on the two diluting steps of the present claims because the addition of water in the laundry machine at the start of the laundering cycle dilutes the composition and further dilutes it until the laundry machine has reached its water level, and during such water addition, the resulting concentration would have overlapped the concentration within those recited.

With respect to difference (3), inasmuch as the compositions may be packaged in conventional glass or plastic vessels as disclosed in page 13, lines 36-37, it would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the step of inverting the rigid container to the washing machine prior to diluting the heterogeneous cleaning composition in order to pour out a portion of the composition for use in the laundering cycle.

9. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu or Antheunis as applied to the above claims, and further in view of Holderbaum et al. (US Patent No. 6,448,212), hereinafter "Holderbaum".

Hsu or Antheunis teaches the features as described above. Hsu or Antheunis, however, fails to specifically disclose the container being a rigid capsule.

Holderbaum teaches the equivalency of bottles, pouches and capsules as packages for laundry/dishwasher detergent portions (see col. 13, lines 5-7). These packages are understood to be rigid.

Art Unit: 1751

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the bottle or pouch of Hsu or Antheunis with a rigid capsule because the substitution of art recognized equivalents as shown by Holderbaum is within the level of ordinary skill in the art.

10. Claims 11, 18, 21, 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gladfelter et al. (US Patent No. 6,211,129), hereinafter "Gladfelter".

Gladfelter teaches a solid chemical concentrate system of at least two cooperative shapes, the first shape is an inwardly curved bar having an inner opening and the second shape is an insert which is capable of interlocking with the bar by insertion into the bar inner opening (see abstract, see also Figure 6). Any application that requires a cleaning product, for example, laundry, may use this cleaning system, and this system is designed for single use or multiple use applications and the ultimate use solution may be prepared manually or by way of a dispensing unit (see col. 2, lines 56-61). The chemical concentrate system of the at least two cooperative shapes may provide at least one substantially continuous surface for contact by an aqueous spray wherein the two cooperative shapes may comprise active chemicals which are either substantially similar, or completely different (see col. 1, lines 10-17). The solids used in the invention may be homogeneous or nonhomogeneous (i.e., heterogeneous), see col. 4, lines 47-48). The composition may comprise any number of active ingredients including alkaline or caustic agents, surfactants, sequestrants and the like (see col. 4, lines 64-67). When carbonate is used as the source of alkalinity, the concentration of this agent generally ranges from about 5 wt-% to 70 wt-% (see col. 5, lines 47-50). Sequestrants include amino carboxylic acids which are

Art Unit: 1751

generally present in concentrations ranging from about 1 wt- to 25 wt-% (see col. 5, line 64 to col. 6, line 9). In Working Example 2, the amount of the nonionic surfactant is 33% and the water, by difference is 7% (see col. 16, lines 51-53), wherein the amount of water is considered as inconsequential amount. The composition may also comprise enzymes which may have a concentration ranging from about 2 wt-% to 25 wt-% (see col. 9, lines 40-43). The laundry composition may also contain optical brighteners and anti-redeposition agents (see col. 17, lines 66-67). The cooperative shapes or pieces are individually wrapped in water soluble packaging and over wrapped with a non-water soluble film (see col. 16, lines 22-26). Gladfelter, however, fails to specifically disclose (1) a method for cleaning textile wherein the heterogeneous composition comprises the recited active ingredients comprising surfactant, sequestrant and enzymes in amounts as those recited, and (2) diluting the heterogeneous cleaning composition to form an intermediate homogeneous cleaning composition and diluting the homogeneous cleaning composition to form a use solution, and diluted in their respective concentrations.

With respect to difference (1), it would have been obvious to one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range of surfactant, sequestrant and enzymes which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454,

Art Unit: 1751

456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges “overlap or lie inside ranges disclosed by the prior art”, see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff*, 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

With respect to difference (2), it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the laundry application of Gladfelter to read on the two diluting steps of the present claims because the addition of water in the laundry machine at the start of the laundering cycle dilutes the composition and further dilutes it until the laundry machine has reached its water level, and during such water addition, the resulting concentration would have overlapped the concentration within those recited.

11. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gladfelter as applied to the above claims, and further in view of Fernholz et al. (US Patent No. 5,858,299).

Gladfelter teaches the features as described above. Gladfelter, however, fails to specifically disclose the respective proportions of the antiredeposition agent and optical brightener in amounts as those recited.

It is known from Fernholz that a similar block or tablet (see abstract) comprises auxiliaries which may preferably be present in amounts of up to 10%, and are more preferably used in amounts of 0.1 to 2%, for example optical brighteners; and anti-redeposition agents (see col. 20, lines 46-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the optical brighteners and anti-redeposition agents in amounts within

Art Unit: 1751

those recited because it is known from Fernholz that said ingredients are incorporated into similar products in amounts of up to 10%.

12. Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gladfelter as applied to the above claims, and further in view of Holderbaum .

Gladfelter teaches the features as described above. Gladfelter, however, fails to specifically disclose a rigid container or capsule.

Holderbaum teaches the equivalency of bottles, pouches and capsules as packages for laundry/dishwasher detergent portions (se col. 13, lines 5-7). These packages are understood to be rigid.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the film packaging of Gladfelter with a rigid capsule because the substitution of art recognized equivalents as shown by Holderbaum is within the level of ordinary skill in the art.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (571) 272-1313. The examiner can normally be reached on Mondays-Fridays from 8:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1751

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lorna M. Douyon
Primary Examiner
Art Unit 1751